REFERENCE SERVICES DIVISION

LIS. NATIONAL LIBRARY OF MEDICINE
WASHINGTON, D.C.
February 1963

SELECTED RECENT REFERENCES ON
MEDICAL ELECTRONICS
compiled by
MARJORY H. WRIGHT

MEDICAL ELECTRONICS IN GENERAL

Bibliography

Rockefeller Institute for Medical Research. Medical Electronics Center. Bibliography on medical electronics. New York, Professional Group on Medical Electronics, 1958. 91 p. [on p. 4, it is stated that the Medical Electronics Center is maintaining a continuing bibliography on medical electronics, which is kept on index cards]. Supplement I, July 1959. 68 p. Supplement II, July 1960. 76 p. \$2.50 for each publication.

Conferences

- 1. IRE Transactions on medical electronics. New York, 1953-, Issues appear irregularly with the proceedings of various conferences and symposia. Published by the Professional Group on Medical Electronics of the Institute of Radio Engineers, 1 East 79th Street, New York 21, New York.
- 2. Second International Conference on Medical Electronics.
 Proceedings. Held, Paris, 24-27 June 1959. 1960. 614 p.
 Charles C. Thomas Publishers, 301-327 East Lawrence Avenue,
 Springfield, Illinois. \$29.50.
- 3. Third International Conference on Medical Electronics. Proceedings. Held, London, 21-27 July 1960. 1961. 3 v. Institution of Electrical Engineers, Savoy Place, London W.C.2, England. \$20.75.

POTO N'IL REDIRATE BAIR VERT MINISTER DE PROSETT BACORTAN DE RECENTANTE DE ROSAL GRANDES

> MO STORMATURE I SOUR SETORING COUNCRESSIE DACTOR

> > INTERIOR BETTERNISTED IN CREEKEN

TANK TALLE

Lockethler Locket, Stiller Receipt on medical electronical Steakerthler Locket, Stiller Court of Stiller Cou

18083247 100

- L. 146 Transportions on no Lock electronias, Now York, 1957a.

 France of the army planty with the proceedings of washing out of the freezentation.

 Or on hedical also cratics of the Institute of Radia.

 Engineers & Siet of a Circuit, Now York 21 ten York.
- Percent International Conference on heaven Electronics of the properties of the prop
 - Proceedings of Figure of Markette Local Company of the Company of the Local Company of Figure of Figure 1 and 1965, 1965

Arch,
ZQT
34
U585s
81963 NATIONAL LIBRARY OF MEDICINE
BETHESDA 14, MD.

- 4. Fourth International Conference on Medical Electronics.
 Digest. Held, New York, 16-21 July 1961. 288 p. Institute of Radio Engineers, 1 East 79th Street, New York 21, New York. \$3.00.
- 5. First National Biophysics Conference. Proceedings. Held, Columbus, Ohio, 4-6 March 1957. 1959. 756 p. Yale University Press, New Haven, Connecticut. \$18.75.
- 6. Moyer, J. H., ed. Application of computers in cardiovascular disease. Symposium. Held, Philadelphia, 27-28 February 1962. (Amer Heart Assn Monogr No. 5) Circulation Res 11 (No. 3, Pt 2): 485-649, 1962.
 25 papers presented on the use of both digital and analogue computers.
 A copy of the symposium may be obtained from the American Heart Association, 44 East 23rd Street, New York 10, New York, \$2.50.

Periodicals

. .

- 1. Medical electronics news; instrumentation, electronic and electromechanical devices for use in bio-medical research, diagnosis and therapy, radiology, air pollution, etc. Pittsburgh, Pa., Instrument Publishing Co. Quarterly. V.l, March 1961-
- 2. American journal of medical electronics. New York, Reuben H. Donnelly Corporation. Quarterly. V. 1, 1961- First issue appeared as Journal of Medical Electronics.

- 1. Ledley, R. S., Lusted, L. B. Biomedical electronics: potentialities and problems. Science 135: 198-201, 1962. General discussion of both analog and digital computers. 26 references.
- 2. Lusted, L. B. Some unsolved problems in biomedical electronics. IRE Trans Med Electronics ME-7: 200-1, 1960.

- A. Fourth international Conference on Ferroal Electronics,
 Dignate, Held, New York, 10-21 2005 1961, 200 p. Invittore
 of Helds Employers, 2 East, 75th Jurain, New York 31,
 How years, 25.00.
 - 5. First National Biophysics Conformac, Fronsecings, Meid, Columnie, Maio, A-5. March 1977. 1959, 750 p. 7ala Malwaresty Press, New Hayer, Connections. 188.75.
- disease Symposium, wold, chilocalphia, 27-2: Fabruary 1952.

 (Associate Symposium, wold, chilocalphia, 27-2: Fabruary 1952.

 (Association New Yorks Association New 11 (Ad. 2; Pt 2):

 Alleger (Association New Yorks) and analysis of the contraction new Association New Yorks)

of potents proceeded on how use of both digital and analogue

A regg of the symposius may so obtained from the American Case Association, 4d East wird Street, New York 10, Hew York, 20.00.

eliares - N

- definited alectronics news, impresentation, electronic different automorphism of the block reconstraint devices for the block reconstraint devices for politicism, etc. Instrument Realization Co. Constant, V.I., Martin 1961
 - 2. Amelican journal of celton diceteories, Now York, Bechan H. Remeally Corporation: Cuarterly, V. 3, 1901- Piert Lemma appeared as Journal of Medical Electronics.

sulptons landacting

- 1. Ledley, A. I., basted, L. B. Dismutted electronics potential electronics potential electronic laterals and problems, full computers. If references, of sometime of both smaley and district computers. If references,
- Lusted, L. P. Rose uncolved problems in biomedical electronics.
 Lusted, L. P. Rose uncolved problems in biomedical electronics.

DIGITAL COMPUTERS

Review articles

- 1. Ledley, R. S., Lusted, L. B. The use of electronic computers in medical data processing; aids in diagnosis, current information retrieval, and medical record keeping. IRE Trans Med Electronics ME-7: 31-47, Jan 1960. 22 references.
- 2. Ledley, R. S. Digital electronic computers in biomedical science. Science 130: 1225-34, 1959. Contains a selected bibliography of 79 items.

- 1. Brazier, M. A. Some uses of computers in experimental neurology. Exp Neurol 2: 123-43, 1960.
- 2. Brodman, K. Diagnostic decisions by machine. IRE Trans Med Electronics ME-7: 216-9, 1960.
- 3. Brodman, K. and others. Interpretation of symptoms with a data-processing machine. Arch Intern Med (Chicago) 103: 776-82, 1959.
- 4. Ledley, R. S., Lusted, L. B. Reasoning foundations of medical diagnosis. Science 130: 9-21, 1959.
- 5. Lipkin, M., Hardy, J. D. Mechanical correlation of data in differential diagnosis of hematological diseases. JAMA 166: 113-25, 1958.
- 6. Lipkin, M. and others. Digital computer as aid to differential diagnosis. Arch Intern Med (Chicago) 108: 56-72, 1961.
- 7. Pell, S. Electronic processing of industrial medical data. With special reference to "surgical convalescence" statistics. J Occup Med 1: 537-40, 1959.

DIGITAL CONTURNS

as falles water a

Thomas of the second of the se

Lotter R. S. Diritel electronic competers in elementent potent unions 130: 1225-14, 1-50: Contains a melectronic bibliographs of 50 disease

Perfectors selected

Prodler, N. A. 15th uses of cassalars to experimental means age to the control of the control of

2, stemmin h. Discharged descention of require. 15 Trush

Proposaj F. and oto, ero laterpretetion of spurious with a carte-proposition of a continue of dula carte-proposition and a carte-proposition and a carte-proposition of a carte-proposi

Ledley N. C., Dared, L. H. Besting forgostions of

Lipsin to acceptance for description of the poster of the description of the contract of the c

Lipida dinesate Are letter to the Salar Salar as Salar Salar

- 8. Schenthal, J. E. and others. Clinical application of large-scale electronic data processing apparatus. I. New concepts in clinical use of the electronic digital computer.

 JAMA 173: 7-11, 1960.
- 9. Weinrauch, H., Hetherington, A. W. Computers in medicine and biology. JAMA 169: 240-45, 1959.

ANALOG COMPUTERS

Books

- 1. Bukstein, E. J. Medical electronics. 1959. Frederick Ungar Publishing Co., 131 East 23d Street, New York 10, New York. \$3.50.
- 2. Donaldson, P. E. K. Electronic apparatus for biological research. London, Butterworth, 1958. 718 p. Edition published by Academic Press, Inc., 111 Fifth Avenue, New York 3, New York. \$20.00.
- 3. Licht, Sidney. Therapeutic electricity and ultraviolet radiation. 1959. 373 p. Elizabeth Licht, Publisher, 360 Fountain Street, New Haven, Connecticut. \$10.00.
- 4. Morris, A. C. A physician's introduction to electronics; a laboratory manual. 1961. 43 p. Pergamon Press, Inc., 122 East 55th Street, New York 22, New York. \$2.50.
- 5. Nightingale, Alfred. Physics and electronics in physical medicine. 1959. 292 p. G. Bell and Sons, Ltd., York House, Portugal Street, London W.C.2, England. \$4.50.
- 6. Stacy, R. W. Biological and medical electronics. 1960. 308 p. McGraw-Hill Book Company, Inc., 330 West 42nd Street, New York 36, New York. \$9.50.
- 7. Whitfield, I. C. An introduction to electronics for physiological workers. 2d ed. 1959. 263 p. St. Martin's Press, Inc., 175 Fifth Avenue, New York 10, New York. \$3.75.

Sementhal, J. E. and obsert. Clinical agaliantion of large-scale electronic data processing apparatus. 1. New con-capte in clinical use of the of original digital eccuator, the 173: Tell, 1960.

- Eukebein, E. . Widteel electrynies, 1959. Frederick Ungur Publicator Co., 131 East 23d Street, New York 10,
- remarca, London, Butterworth, 1932, VIS p. Edition
- Licht, Sidney, Thermoughe electricity and ultraviolat radiation. 1959. 373 p. Elizabeth Light, Furtherer, 360 Fountain Erreat, New Haven, Connections, 810.00.
- Mightingele, Glived, Physics and electronics in physical medicine, 1890, 292 p. C. Bell and Sons, Lic., York
 - Charge, S. L. Ciulleleal and medical electronics. 1963. 308 p. Hedray-Hill Free Company, inst. 330 Gast Acad Steps S. Wew York 36, dev Perk. 1963.
- -single to a composition to alwatenion for physiclogical wormers. 2d ed. 1935; 263 p. St. Hartiste Frank int., 475 Fifth Arenus, New York 10, Wes York. 13.79.

Conferences

- 1. Eleventh annual conference on electrical techniques in medicine and biology. Held, Minneapolis, 19-21 November, 1958. IRE Trans Med Electronics ME-6: 107-89, Sept 1959.
- 2. Twelfth annual conference on electrical techniques in medicine and biology. Held, Philadelphia, 10-12

 November 1959. IRE Trans Med Electronics ME-7: 200-30, July 1960. Also published separately: U.S. Air Force. Rome Air Development Center. Technical report RADC-TR-59-227. 1959. 97 p.
- 3. Institute of Radio Engineers. Ultrasonics, medical and industrial electronics. Part 9 of IRE Convention Record. 1955 National Convention held in New York, 21-24 March 1955. 141 p. Panel discussion on medical electronics, held March 24, was published later in: IRE Trans Med Electronics ME-2: 3-39, Oct 1955.

- 1. Beljan, J. R., Berry, R. E. The use of radiofrequency conduction techniques for biologic investigation.

 Surgery 46: 288-97, 1959.
- 2. Geddes, L. A. and others. Acquisition of physiologic data at the bedside; a progress report. Amer J Med Electronics 1: 62-9, 1962.
- 3. Rentsch, W. Electronic device for direct recording of a combined circulation-regulation test in daily practice.

 Amer J Med Electronics 1: 195-8, 1962.
- 4. Ryan, L. J. A portable, self-contained electronic cardio-tachometer for the medical research profession evolved by a unique group of engineers. IRE Trans Med Electronics ME-7: 221-4, 1960.
- 5. Taylor, W. K. Analogue computers for research on learning. Brit Med J, No. 5102: 967-68, 1958.

211207 2000

- 1. Elementa control conference on electrical tochniques in medicine and bishops, deld, Richnespolic, 19-31 Hermanner, 1958. INC. Rome had Electron.or Hester.
- 2. Testine and biology. Held, Philadelpois, Mr-12.
 Herender 1959, Ist Trans Med Clectronies Mr-9; 200-30,
 Lely 1960. Also published separately: U.S. Air Forest.
 Roos Air Davelor and Center, Technical report RAM-IN-
- 1955 Methods of Padio Engineers, Thresholds, sedies and industrial observation, Pers 9 of IME Convention Resord, 1955 Methods Convention hald in New York, 21-16 Marsh 1955 Mal p. Femal observation on sediest observations and Marsh 24, wer political later in: 186 Trans 186 Electronies Ma-2: 1-29, Out 1937.

- 1. Beljen, J. H. Berry, R. E. The use of redictron and conducation techniques for tighted investigation.
- 2. Gedder, L. A. and v. ners. Acquisition of Alyacologue data at the bedilon; a progress report. Nor 1 Med Electrosics I: Diest, 1963.
- S. Rentrol, W. Blackman device for direct recording of a comitmen electron continued circularance of all latter to delly practice.
- tendrometer for the plaint reported on destroit of the line of the second of the secon
- S. Paylor, W. E. Galopin corrector for resured on liarding,